PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Director of the U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Marta KARCZEWICZ, Yiliang BAO, Justin RIDGE

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD AND SYSTEM FOR SCALABLE BINARIZATION OF VIDEO

DATA

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date March 9, 2004, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number <u>EV303713715US</u>, addressed to: Mail Stop Patent Application, Director of the U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

> Cathy Wilcox (type or print name of person-mailing paper)

Signature of person mailing paper

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot **WARNING:** be used to obtain a date of mailing or transmission for this correspondence.

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing **WARNING:** label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

> Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at

56,442.

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

□ Continuation

□ Continuation-in-part (C-I-P)

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).				
		The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.				
3.	Papers	Enclosed				
	(De 14 F 5 P	 A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application 14 Pages of specification 5 Pages of claims 5 Sheets of drawings 				
	WARNIN	G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).				
	NOTE:	"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).				
		(complete the following, if applicable)				
		The enclosed drawing(s) are photograph(s). Three (3) sets of photographs and a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)" are attached. 37 C.F.R. § 1.84(b). The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b). formal informal				
	B. Oth	er Papers Enclosed				
	Pages of declaration and power of attorneyPages of abstractOther (Title Page)					
4.	Additio	nal papers enclosed				
		Amendment to claims				
		 □ Cancel in this application claimsbefore calculating the filing fee. (At least one original independent claim must be retained for filing purposes.) □ Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.) 				
		Preliminary Amendment				
		Information Disclosure Statement (37 C.F.R. § 1.98)				
		Form PTO-1449 (PTO/SB/08A and 08B)				

☐ Citations

	: כ ו	Sub perf	claration of Biological Deposit omission of "Sequence Listing," computer readable copy and/or amendmen taining thereto for biotechnology invention containing nucleotide and/or amino d sequence.						
0	ו	Auti Rep	horization of Attorney(s) to Accept and Follow Instructions fron presentative						
		Spe Oth	ecial Comments ner						
5. D	ec	lara	ation or oath (including power of attorney)						
NOTE	OTE: A newly executed declaration is not required in a continuation or divisional application the prior nonprovisional application contained a declaration as required, the application by all or fewer than all the inventors named in the prior application, there is no new application being filed, and a copy of the executed declaration filed in the prior application the signature or an indication thereon that it was signed) is submitted. The accompanied by a statement requesting deletion of the names of person(s) who are not the application being filed. If the declaration in the prior application was filed under copy of that declaration must be filed accompanied by a copy of the decision granting or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).								
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).							
NOTE:		"The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).							
	☐ Enclosed		Enclosed						
		Executed by							
			(check all applicable boxes)						
			inventor(s). legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43. joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.						
			☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee						
		X	Not Enclosed						
NOTE	1	the l may FOR	ere the filing is a completion in the U.S. of an International Application or where the completion of U.S. application contains subject matter in addition to the International Application, the application of the treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGICA NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION IMMED.						
			☐ Application is made by a person authorized under 37 C.F.R. § 1.41(c) of behalf of <i>all</i> the above named inventor(s).						

(The declaration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inventorship Statement
WARNING : If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inventorship for all the claims in this application are:
☐ The same.
or
 Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made, is submitted.
☐ will be submitted
7. Language
NOTE: An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).
⊠ English
□ Non English
☐ The attached translation includes a statement that the translation is accurate.
37 C.F.R. § 1.52(d).
8. Assignment
An assignment of the invention to <u>Nokia Corporation</u>
 □ is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached. ☑ will follow.
NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING: A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 193, 1150 O.G. 62-64.
☐ This is a ☐ continuation ☐ divisional application and the assignment
document for the parent application 0 / was filed on
 -
Reel Frame

Ce	ertified (copy(ies) of applica	ation(s)			
Country			Appln. No.			Filed	
			Applr	n. No.	Filed		
Co	ountry			Applr	n. No.		Filed
from w	hich pr	iority is	claimed				
		(are) at					
NOTE:			ication formii C.F.R. § 1.55(-	he clai	m for priority mu	st be referred to in the oath or
NOTE:	U.S. a _l § 120 i PAGE:	oplication is itself en S FOR	or Internation titled to priori	al Application from ty from a prior for	m whic eign ap	h this application oplication, then co	d directly relates. If any parent claims benefit under 35 U.S.C. complete item 18 on the ADDED BENEFIT OF PRIOR U.S.
10. Fe	e Calc	ulation	(37 C.F.R.	§ 1.16)			
A.	X	Regu	lar applica	tion			
-				CLAIMS A	S FIL	ED	
Numbe	er filed			Number Extra	а	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$770.00
Total (I.16(c))	23 -20 =	3	x	\$18.00 =	\$54.00
	endent (F.R. §	Claims I.16(b))	3 - 3 =	0	x	\$86.00 =	-0-
		ndent cl F.R. § 1.			+	\$280.00	
		mendm	ent deletin	ing extra claim g multiple-dep is not being p	ende	ncies is enclo	sed.
NOTE:	amend	ment, pric	or to the expi		period	set for response	aid or the claims canceled by by the Patent and Trademark
				Filing Fee Ca	lculat	ion	\$ 824.00
	В. С		ın applicat).00 – 37 C	ion C.F.R. § 1.16(f))		
				Filing Fee Ca	lculat	ion	\$

9. Certified Copy

	C.	□ Plant application
		(\$510.00 - 37 C.F.R. § 1.16(g))
		Filing Fee Calculation \$
11. Sn	nall	Entity Statement(s)
		atement(s) that this is a filing by a small entity under 37 C.F.R. §§ 1.9 and 1.27 no longer necessary.
WARNII	VG:	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WARNII	VG:	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P., § 509.03, 6 th ed., rev. 2, July 1996 (emphasis added).
		(complete the following, if applicable)
		☐ Status as a small entity was claimed in prior application
		35 U.S.C. § □ 119(e),
		□ 120,
		□ 121,
		□ 365(c),
		and which status as a small entity is still proper and desired.
		A copy of the statement in the prior application is included.
		Filing Fee Calculation (50% of A, B, or C above)
		\$
NOTE	f	Any excess of the full fee paid will be refunded if a small entity statement and a refund request are filed within 2 months of the date of timely payment of a full fee. The two-month period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).
12. Re	que	st for International-Type Search (37 C.F.R. § 1.104(d))
		(complete, if applicable)
		ease prepare an international-type search report for this application at the time en national examination on the merits takes place.

13. Fee Payment Being Made at This Time ☑ Not Enclosed ☑ No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can be paid subsequently.)

En	closed	
	Filing fee	\$
	Recording assignment (\$40.00 – 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$
	Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i))	\$
	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
	Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l))	\$
	Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
for to 3 app	C.F.R. § 1.21(I) establishes a fee for processing and retaining any applicat failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, a 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the bilication, either the basic filing fee must be paid, or the processing and ret st be paid, within 1 year from the notification under § 53(f).	s well as the changes enefit of a prior U.S.
То	tal fees enclosed	\$
etho	d of Payment of Fees	
Att	ached is a □ check □ money order in the amount of \$	
Au	thorization is hereby made to charge the amount of \$	

14. Me ☐ to Deposit Account No. _____

□ to Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING:: Credit card information should not be included on this form as it may become public.

NOTE:

☐ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

15. Authorization to Charge Additional Fees

WARNING:	: If no	If no fees are to be paid on filing, the following items should <u>not</u> be completed.					
WARNING:		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.					
	follo	e Office is hereby authorized to charge, in the manner shown above, the owing additional fees that may be required by this paper and during the ire pendency of this application.					
		37 C.F.R. § 1.16(a), (f), or (g) (filing fees) 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims)					
pi tii m	resentat me peri night be	additional fees for excess or multiple dependent claims not paid on filing or on later ion must only be paid or these claims canceled by amendment prior to the expiration of the od set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it best not to authorize the P.T.O. to charge additional claim fees, except possibly when with amendments after final action.					
		37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)					
		37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))					
		37 C.F.R. § 1.17 (application processing fees)					
WARNING:	cond its ti of til of til futul subl petit	written request may be submitted in an application that is an authorization to treat any current or future reply, requiring a petition for an extension of time under this paragraph for mely submission, as incorporating a petition for extension of time for the appropriate length me. An authorization to charge all required fees, fees under § 1.17, or all required extension ne fees will be treated as a constructive petition for an extension of time in any concurrent or re reply requiring a petition for an extension of time under this paragraph for its timely mission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive ion for an extension of time in any concurrent reply requiring a petition for an extension of under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).					
		37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))					
0	f a Notic	a authorization to charge the issue fee to a deposit account has been filed before the mailing see of Allowance, the issue fee will be automatically charged to the deposit account at the ailing the Notice of Allowance, 37 C.F.R. § 1,311(b).					

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

16. Instructions as to Overpayment

Customer No. 004955

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).						
	☐ Credit Account No ☐ Refund						
	March 9, 2004 No. 40,061	SIGNATURE OF PRACTITIONER					
	o. (203) 261-1234	Kenneth Q. Lao (type or print name of practitioner Ware, Fressola, Van Der Sluys & Adolphson LLP 755 Main Street P.O. (Correspondence) Address P.O. Box 224					

Monroe, CT 06468

	Inc	ncorporation by reference of added pages					
	Ù.S cor PA	eck the following item if the application in this transmittal claims the benefit of prior 5. application(s) (including an international application entering the U.S. stage as a ntinuation, divisional or C-I-P application) and complete and attach the ADDED GES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR 5. APPLICATION(S) CLAIMED.)					
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed Number of pages added					
		Plus Added Pages for Papers Referred to in Item 4 Above					
		Number of pages added					
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.					
		Number of pages added					
		Plus "Assignment Cover Letter Accompanying New Application"					
		Number of pages added					
X	Sta	tement Where No Further Pages Added					
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.					
	X	This transmittal ends with this page.					